

PUBLIC HEALTH REGULATIONS

Department of Health
State of Hawaii
Chapter 37-A
Water Quality Standards

Under and by virtue of the provisions of [Sections 46-13 and 46-16, Revised Laws of Hawaii 1955,] Chapter 342, Hawaii Revised Statutes, and the Federal Water Pollution Control Act Amendments, 1972 PL 92-500, and all other applicable laws, Chapter 37-A of the Public Health Regulations, Department of Health, State of Hawaii, is hereby amended to read as follows:

Section 1. PURPOSE AND SCOPE

Pursuant to the authority granted by [Section 46-16, Revised Laws of Hawaii 1955.] Chapter 342, Part III, Section 342-32 Hawaii Revised Statutes, the Director of Health of the State of Hawaii appointed a Master to divide the waters of the State into areas and to recommend to the Director standards of water quality for such water areas. Except as modified in this Chapter, the standards recommended by the Master are hereby adopted. The standards adopted, hereinafter set forth, shall be the standards of water quality for the purposes of Chapter 45, Public Health Regulations, Department of Health, State of Hawaii, and shall be enforced and administered as provided therein.

Section 2. DEFINITIONS

- A. "Near shore waters" means all coastal waters lying within a defined reef area, all waters of a depth less than ten fathoms, or waters up to a distance of 1,000 feet off-shore if there is no defined reef area and if the depth is greater than ten fathoms.
- B. "Off-shore waters" means all coastal waters beyond the limits defined for "near shore waters."
- C. "Coastal waters" includes "near shore waters," "off-shore waters" and all [those brackish waters, fresh waters and salt] waters that are subject to the ebb and flow of the tide.

Section 3. CLASSIFICATION OF WATER USES

A. Classification of Coastal Water Uses

Coastal waters are classified in accordance with the uses to be protected in each class as follows:

1. Class AA waters

The uses to be protected in this class of waters are oceanographic research, the support and propagation of shellfish and other marine

life, conservation of coral reefs and wilderness areas, compatible

recreation and aesthetic enjoyment.

It is the objective of this class of waters that they remain in as nearly their natural, pristine state as possible with an absolute minimum of pollution from any source. To the extent possible, the wilderness character of such areas shall be protected. No zones of mixing _____ will be permitted in these waters.

The classification of any water area as Class AA shall not preclude other uses of such waters compatible with these objectives and in conformance with the standards applicable to them.

2. Class A waters

The uses to be protected in this class of waters are recreational, including fishing, swimming, bathing [and] , other water-contact sports [and] , aesthetic enjoyment [.] and the support and propagation of aquatic life.

It is the objective for this class of waters that their use for recreational purposes and aesthetic enjoyment not be limited in any way. Such waters shall be kept clean of any trash, solid materials or oils and shall not act as receiving waters for any effluent which has not received the best practicable treatment or control compatible with the standards established for this class.

3. Class B waters

The uses to be protected in this class of waters are small boat harbors, commercial [.] and industrial shipping, bait fishing, compatible recreation, the support and propagation of aquatic life and aesthetic enjoyment.

It is the objective for this class of waters that discharges of any pollutant be controlled to the maximum degree possible and that sewage and industrial effluents receive the best practicable treatment or control compatible [for] with the standards established for this class.

The Class B designation shall apply only to a limited area next

to boat docking facilities in bays and harbors. The rest of the water area in such bay or harbor shall be Class A unless given some other specific designation in Section 5.

B. Classification of Fresh Water Uses

Fresh waters are classified in accordance with the uses to be protected as follows:

1. Class 1 Waters

The uses to be protected in this class of waters are drinking water supply [and], food processing [.] , the support and propagation of aquatic life and compatible recreation.

It is the objective of this class of waters that they remain as nearly the natural state as possible with an absolute minimum of pollution from any source. To the extent possible, the wilderness character of such areas shall be protected. Waste discharges into these waters are prohibited.

2. Class 2 waters

The uses to be protected in this class of waters are bathing, swimming, [recreation, growth and propagation of fish and other] the support and propagation of aquatic life, and agricultural and industrial water supply.
compatible recreation

It is the objective for this class of waters that their use for recreational purposes, propagation of fish and other aquatic life and agricultural and industrial water supply not be limited in any way. Such waters shall be kept clean of trash, solid materials or oils and shall not act as receiving waters for any effluent which has not received the best practicable treatment compatible with the standards established for this class.

Section 4. ZONES OF MIXING

[**] Zones of Mixing for the assimilation of municipal, agricultural and

industrial discharges which have received the best practicable treatment or control are recognized as necessary.

It is the objective of this limited zone to provide for a current realistic means of control over such discharges and at the same time achieve the highest attainable level of water quality.

Section 5. CLASSIFICATION AND ESTABLISHMENT OF WATER AREAS

The following classification of water uses shall apply to the following areas.

A. Coastal Water Areas and Non-Tidal Brackish and Saline Water Areas

1. Oahu

[**] (a) Class AA waters

Waimanalo Bay from Makapuu Point to the southerly boundary of Kaiona Beach Park and including the waters surrounding Manana and Kaohikaipu Islands.

Kaneohe Bay.

Kahana Bay.

Waialua Bay, from Puaena Point to Kaiaka Point.

The near shore waters along Kaena Point for a distance of

3 1/2 miles towards Mokuleia and 3 1/2 miles towards Makua.

That portion of West Loch, Pearl Harbor, lying north of a
tangent drawn from Nichols Point to Loch Point.

Hanauma Bay.

[**] (b) Class A waters

That portion of Waimanalo Bay not designated Class AA.

Kailua Bay, from Wailea Point to Mokapu Point.

The near shore waters between Mokapu Point and Pyramid Rock.

The near shore waters between Makalii Point and Laie Point.

Laie Bay.

All coastal waters and non-tidal brackish and saline waters not
included in any other class.

(c) Class B waters

Kaneohe Bay small boat harbor adjacent to Kaneohe Yacht Club.

Kaneohe Marine Corps Air Station small boat harbor and pier area.

Kewalo Basin.

Ala Wai Boat Harbor.

Pokai Bay small boat harbor.

Haleiwa small boat harbor.

Keehi Lagoon marina areas.

Heeia-Kea small boat harbor.

Campbell Estate Industrial Harbor.

Pearl Harbor - Middle Loch and East Loch and that portion
of West Loch not classed as AA waters.

Honolulu Harbor.

Hickam Harbor.

Kuapa Pond marina areas.

2. Kauai

(a) Class AA waters

The near shore waters between [Hikinoe] Hikimoe Valley
and Puu Poa Point, including Wainiha Bay and Hanalei Bay.

The near shore waters between Ka Lae Kiki Point to Makahuena
Point.

(b) Class A waters

[All coastal waters of the island of Niihau.]

All coastal waters and non-tidal brackish and saline waters
[of the island of Kauai] not included in any other class

(c) Class B waters

Wailua River small boat harbor.

Kukuiula [Bay.] small boat harbor.

Hanapepe Bay small boat harbor.

Kikiaola Harbor.

Nawiliwili [Bay.] Harbor.

Port Allen [, Hanapepe.] Harbor.

3. Niihau(a) Class AA waters

The near shore waters surrounding the island of Niihau.

(b) Class A waters

All coastal waters not included in any other class.

[3] 4. Molokai(a) Class AA waters

The near shore waters between the westerly boundary of Haleolono Harbor and Laau Point.

The near shore waters between Laau Point and Ilio Point and from Ilio Point to Lamaola Head.

[*] The near shore waters from Cape Halawa to the easterly boundary to Kaunakakai Harbor, [except the waters of and from Kalaeloa Harbor, westerly, to and including the near shore waters adjoining the Ahupuaa of Puaahala and Kalokoiki Fish Pond.]

(b) Class A waters

Halawa Bay.

The near shore waters from the westerly boundary of Kaunakakai Harbor to the easterly boundary of Haleolono Harbor.

The coastal waters and non-tidal brackish and saline waters not included in any other class.

(c) Class B waters

Kaunakakai Harbor.

Haleolono Harbor.

Kalaeloa Harbor.

[*The waters of and from Kalaeloa Harbor, westerly, to and including the near shore waters adjoining the Ahupuaa of Puaahala and Kalokoiki Fish Pond.]

[4.] 5. Lanai

(a) Class AA waters

[The near shore waters from the westerly boundary of
Hulopoe Bay to Kaiolohia Bay.]

All near shore waters not included in any other class.

[The near shore waters from Kamaika Point to the easterly
boundary of Manele Bay.]

(b) Class A waters

All coastal waters and non-tidal brackish and saline waters
not included in any other class.

Manele Bay.

(c) Class B waters

Manele [Bay.] Harbor.

Kaumalapau Harbor.

[5.] 6. Maui

(a) Class AA waters

The near shore waters between Nakalele Point and Waihee Point.

The near shore waters between Huelo Point and [Naualele Point.]

Puu Olai.

(b) Class A waters

All coastal waters and non-tidal brackish and saline waters

not included in any other class.

(c) Class B waters

Maalaea small boat harbor.

Lahaina small boat harbor.

Kahului [Bay.] Harbor.

Hana Harbor.

[**6] 7. Hawaii

(a) Class AA waters

The near shore waters from [Ka Lae]-Lelewi Point to

Waiulaula Point.

(b) Class A waters

The near shore waters from the northern boundary of Kawaihae

Harbor to the southern boundary of Mahukona Harbor.

The near shore waters from Kauili Point to the westerly
boundary of Hilo Harbor.

[The near shore waters from the easterly boundary of Hilo
Harbor to Ka Lae, excepting Honaupo Bay.]

All coastal waters and non-tidal brackish and saline waters
not included in any other class.

(c) Class B waters

Honaupo Bay.

Kealakekua Bay.

Keauhou Bay.

Kailua Bay.

Honokahau Bay.

Mahukona Harbor.

Hilo Harbor.

Kawaihae Harbor.

8. All other islands of the State

(a) Class AA waters

shore
All near / waters of all islands not classified in Section 4.A.1.

(b) Class A waters

All coastal waters and non-tidal brackish and saline waters not included in any other class.

B. Fresh Water Areas

1. Class 1 waters

All sources of fresh surface waters on all islands whether publicly or privately owned, used for domestic, culinary or food processing purposes.

2. Class 2 waters

All fresh water streams, canals, ponds, lakes, reservoirs and rivers on all islands whether publicly or privately owned not included in Class 1.

Section 6. WATER QUALITY STANDARDS

A. Basic Standards Applicable to all Water Areas

All waters shall be free of substances attributable to discharges or wastes as follows:

1. [Materials that will settle to form objectionable deposits;]

Domestic or industrial waste or other controllable sources that will settle to form sludge or bottom deposits in amounts sufficient to be unsightly, putrescent or odorous, or in amounts sufficient to interfere with any beneficial use of the water;

2. [floating debris, oil, scum and other matter;]

Floating debris, oil grease, scum and other floating materials

attributable to domestic or industrial waste or other controllable sources

in amounts sufficient to be unsightly or in amounts sufficient to interfere

with any beneficial use of the water;

3. [Substances producing objectionable color, odor, taste or turbidity;]

Domestic or industrial waste or other controllable source in

amounts sufficient to produce taste or odor in the water or detectable

off-flavor in the flesh of fish, or in amounts sufficient to change the

existing color, turbidity or other conditions in the receiving waters

to such degree as to create a public nuisance, or in amounts sufficient

to interfere with any beneficial use of the water;

4. [Materials, including radionuclides, in concentrations or combinations

which are toxic or which produce undesirable physiological responses in

human, fish and other animal life and plants;]

High temperature, biocides, organisms pathogenic to human beings, toxic, corrosive, or other deleterious substances attributable to domestic or industrial waste or other controllable sources at levels or combinations sufficient to be toxic to human, animal, plant or aquatic life or in amounts sufficient to interfere with any beneficial use of the water. A water shall be evaluated by the use of a 96-hour bioassay as described in the most recent edition of Standard Methods. Compliance with water quality standards is achieved when the survival of test organisms equals or exceeds that in any control group;

5. [Substances and conditions or combinations thereof in concentrations which produce undesirable aquatic life.]

Radioactive materials attributable to municipal, industrial or other controllable source in excess of minimum concentrations which are physically and economically feasible to achieve. In no case shall such material exceed the limits established in the 1952 Public Health Service Drinking Water Standards (or later amendments) or 1/30th of the MPC,

values given for continuous operational exposure in the National

Bureau of Standards Handbook No. 69. The concentrations in water shall

not result in accumulation of radioactivity in plants or animals that

result in a hazard to humans or harm to aquatic life.

All waters shall also be free from soil particles resulting from erosion on land involved in earthwork, such as the construction of public works, highway, subdivisions, recreational, commercial, or industrial developments, or the cultivation and management of agricultural lands.

This standard shall be deemed met if it can be shown that the land on which the erosion occurred or is occurring is being managed in accordance with soil conservation practices acceptable to the Director, and that a comprehensive conservation program is being actively pursued, or that the discharge has received the best practicable treatment or control.

B. Specific Standards Applicable to Particular Water Areas

1. Microbiological Requirements

The median coliform bacteria shall not exceed	Applicable to:
Per 100	Class AA
70/ml. [,] <u>during any 30-day period in which 10 or</u>	

more samples are collected, nor shall samples exceed 230 per 100 ml at any time.

Applicable to:

The median coliform bacteria shall not exceed 1000 per 100 ml, nor shall more than 10% of the samples exceed 2,400 per 100 ml per 100 ml during any 30-day period in which 10 or more samples are collected. Fecal coliform content shall not exceed an arithmetic average of 200 per 100 ml during any 30-day period nor shall more than 10% of the samples exceed 400 per ml in the same time period provided that a minimum of 10 samples are collected during this 30-day period.

Classes A,
1 and 2

For such portion of Class 1 waters from which water is withdrawn for distribution for drinking water or food processing following simple chlorination,

the fecal coliform content shall not exceed an
 arithmetic average of 20 $\frac{1}{10}$ per 100 ml during any
 calendar month $\frac{1}{10}$ in which 5 or more samples
are collected.

Fecal coliform content shall not exceed an Class B
 arithmetic average of 400 $\frac{1}{10}$ per 100 ml during any
 30-day period nor shall more than 10% of the
 samples exceed 1000 $\frac{1}{10}$ per 100 ml in the same time
 period $\frac{1}{10}$ provided that a minimum of 10 samples
are collected during this period.

2. pH -- Units

Applicable to:

Not more than $\frac{1}{2}$ unit difference from natural Class AA
 conditions but not lower than 8.0 nor higher than
 8.5 from other than natural causes. (Not lower

than 7.0 for fresh tidal waters.)

Not more than $\frac{1}{2}$ unit difference from natural conditions but not lower than 7.0 nor higher than 8.5 from other than natural causes.

Not less than 6.5 nor higher than 8.5

Classes A, B, 1

Class 2

3. Nutrient Materials

Applicable to:

Total phosphorus, not greater than 0.020 mg/l. Class AA

Total phosphorus, not greater than 0.025 mg/l. Class A

Total phosphorus, not greater than 0.030 mg/l. Class B

Total phosphorus, not greater than 0.050 mg/l. Classes 1, 2

Total nitrogen, not greater than 0.10 mg/l. Class AA

Total nitrogen, not greater than 0.15 mg/l. Class A

Total nitrogen, not greater than 0.20 mg/l. Class B

4. Dissolved Oxygen (except from natural causes)

Applicable to:

Not less than 6.0 mg/l.

Classes AA,1

Not less than 5.0 mg/l.

Classes A,2

Not less than 4.5 mg/l.

Class B

5. Total Dissolved Solids, Salinity and Currents

Applicable to:

No changes in channels, in basin geometry of the area, or in freshwater influx shall be made which would cause permanent changes in isohaline patterns of more than $\pm 10\%$ of naturally occurring variation or which would otherwise affect biological and sedimentological situation. Total dissolved solids shall not be below 28,000 mg/l from other than natural causes.

Class AA

/**/6. Temperature

Applicable to:

Temperature of receiving waters shall not

Classes AA, A,

change more than 1.5°F from natural conditions.

B, 1 and 2

7. Turbidity

Applicable to:

Secchi disc or secchi disc equivalent as

Classes AA,

"extinction coefficient" determinations shall not

A, B, 1 and 2

be altered from natural conditions more than 5%

for Class AA or Class 1 waters, 10% for Class A

or Class 2 waters, or 20% for Class B waters.

8. Radionuclides

Applicable to:

The concentration of radioactivity in water

Classes AA, A, 1
B, 1 and 2

shall not exceed 1/30th of the MPC_w values given

for continuous occupational exposure in National

Bureau of Standards Handbook No. 69. No radio-

nuclide or mixture of radionuclides shall be

present at concentrations greater than those

specified by the U.S. Public Health Services,

Publication No. 956, as revised in 1962, as

acceptable for drinking waters.]

The concentration of radioactive materials	Classes AA,A,
present in fresh, estuarine, and marine waters	B and 2

shall be less than those that would require

restrictions on the use of organisms harvested

from the area in order to meet the Radiation

Protection Guides recommended by the Federal

Radiation Council.

Analyses to determine water quality shall be based on the
U.S. Environmental Protection Agency manual entitled "Method for
Chemical Analysis of Water and Wastes," as revised and
"Biological Methods for Measuring the Quality of Water and
Wastes" as revised, or as otherwise previously specified or
approved by the Director.

These water quality criteria are based upon the best currently
available data. It is possible that studies planned to be made in
connection with the implementation program may prove them to be

either inadequate or unattainable. For this reason, they will be subject to periodic review and, where necessary, to change. Any change will be made only after public hearing, held in compliance with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health.

Section 7. ZONES OF MIXING

- (a) Every application for a zone of mixing shall be made on forms furnished by the director and shall be accompanied by a complete and detailed description of present conditions, how present conditions do not conform to standards, and such other information as the director may prescribe by rules or regulations.

mixing

(b) Each application for a zone of / shall be reviewed in light of the

descriptions, statements, plans, histories, and other supporting

information as may be submitted upon the request of the director,

and the effect or probable effect upon the water quality standards

established pursuant to this chapter.

(c) Whenever an application is approved, the director shall establish the boundaries of the zone of mixing taking into account protected uses of the body of water, existing natural conditions of the receiving water, character of the effluent, and the adequacy of the design of the outfall and diffuser system to achieve maximum dispersion and assimilation of the treated or controlled waste with a minimum of undesirable or noticeable effect on the receiving water.

mixing

(e) Approval of a zone of / shall be made only after a public hearing is

held by the director in the county where the source is situated in accordance with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health.

mixing

(d) No zone of / shall be granted by the director unless the application

and the supporting information clearly show that:

1) The continuation of the function or operation involved in the

mixing

discharge by the granting of the zone of / is in the public

interest;

2) The discharge occurring or proposed to occur does not sub-

stantially endanger human health or safety; and

3) Compliance with the existing water quality standards from

of mixing

which a zone / is sought would produce serious hardships without equal or greater benefits to the public;

- 4) The discharge occurring or proposed to occur does not violate the basic standards applicable to all waters, will not unreasonably interfere with any actual or probable use of the water areas for which it is classified, and has received the best practicable treatment or control or, in the case of a proposed discharge, will receive the best available demonstrated pollution control technology, processes and operating methods.

(f) Any zone of mixing or renewal thereof shall be granted within the re-

quirements of this section and for time periods and under conditions

consistent with the reasons therefor and within the following

limitation:

mixing

- 1) If the zone of / is granted on the ground that there is no

practicable means known or available for the adequate prevention,

control or abatement of the discharge involved, it shall be

only until the necessary means for prevention, control, or

abatement become practicable and subject to the taking of any

substitute or alternate measures that the director may prescribe.

a

No renewal of / zone of mixing granted under this subsection shall be

allowed without a thorough review of known and available means

of preventing, controlling, or abating the discharge involved.

2) The director may issue a zone of / ^{mixing} for a period not exceeding
five years.

3) Every zone of / ^{mixing} granted under this section shall include conditions,
but not limited to,
requiring the grantee to perform effluent and receiving water sampling and
report the results of such sampling to the director, and to undertake a
program of research to develop practicable alternatives to the methods of
treatment or control in use by the grantee.

(g) Any zone of / ^{mixing} granted pursuant to this section may be renewed from
time to time on terms and conditions and for periods not exceeding
five years which would be appropriate on initial granting of a

zone of mixing; provided that the applicant for renewal has met all of the

conditions specified in the immediately preceding zone of mixing; and

provided, further, that the renewal, and the zone of mixing established in

pursuance thereof, shall provide for discharge not greater than that

attained pursuant to the terms of the immediately preceding zone of mixing

at its expiration. No renewal shall be granted except on application

therefor. Any such application shall be made at least sixty days

prior to the expiration of the zone of mixing.

(h) No zone of ^{mixing} / shall be granted unless the director finds that human

health and safety will not be endangered thereby.

(i) No zone of ^{mixing} / granted pursuant to this part shall be construed to

prevent or limit the application of any emergency provisions and

procedures provided by law.

(j) The establishment of any zone of mixing shall be

subject to the concurrence of the federal Environmental Protection

Agency.

(k) The director, on his own motion, or upon the application of any

person, shall terminate a zone of mixing, if

after a hearing, he shall determine that the water area does not meet

the basic standards applicable to all water areas or that the zone of mixing

granted will unreasonably interfere with any actual or probable use of

the water area or that the discharge does not receive the best

practicable treatment or control or that the new discharge did not receive the best available demonstrated pollution control technology, processes and operating methods. Such termination shall be made only

after a hearing held by the director on the island where the area is

situated in accordance with the Hawaii Administrative Procedure Act

and the Rules of Practice and Procedure of the Department of Health.

Upon such termination, the standards of water quality applicable thereto

shall be those established for the water as otherwise classified.

Section 7. ESTABLISHMENT OF ZONES OF MIXING

**Upon the application of any person requesting that a portion of the waters of the State be zoned for the assimilation of agricultural, municipal and industrial discharges, if the Director shall determine that such use will not violate the basic standards applicable to all waters, that such use will not unreasonably interfere with any actual or probable use of the water areas for which it is classified and that the discharges receive the best practicable treatment or control he shall then designate such portion as a zone of mixing.

**The boundaries of each zone of mixing shall be fixed by the Director, taking into account protected uses of the body of water, existing natural conditions of

the receiving water (i.e., depth, currents, location, etc.), character of the effluent, and the adequacy of the design of the outfall and diffuser system to achieve a maximum dispersion and assimilation of the treated or controlled waste with a minimum of undesirable or noticeable effect on the receiving water. The character and the source of effluent permitted to be discharged into the zone of mixing shall be stated by the Director in the designation of the zone.

Each designation of a zone of mixing shall set forth the conditions under which it is issued. The conditions may include, but shall not be limited to, a requirement that the designee shall do effluent and receiving water sampling and shall report the results of such sampling to the Director or that the designee shall undertake a program of research to develop practicable alternatives to the methods of treatment or control in use by the designee.

The application shall be made on forms furnished by the Director and shall contain the information required therein.

The establishment of a zone of mixing and the boundaries thereof shall be

made only after hearing held by the Director on the island where the area is situated in accordance with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health.]

Section 8. TERMINATION OF ZONES OF MIXING

****The Director may designate a water area as a zone of mixing for any period not exceeding ten years. Upon expiration of the period stated in the designation, the zone of mixing shall automatically terminate and no rights shall become vested in the designee. A water area may be redesignated as a zone of mixing for additional periods not exceeding ten years, upon application.**

****The Director, on his own motion, or upon the application of any person, shall terminate the designation of the water area as a zone of mixing, if after a hearing, he shall determine that the water area does not meet the basic standards applicable to all water areas or that the use of the water area as a zone of mixing will unreasonably interfere with any actual or probable use of the water area or that the discharge into the zone of mixing does not receive the best practicable**

treatment or control. Such termination shall be made only after a hearing held by the Director on the island where the area is situated in accordance with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health. Upon such termination, the standards of water quality applicable thereto shall be those established for the water as otherwise classified.

8.

Section 9. EFFECTIVE DATE

This Chapter shall become effective thirty sixty days after filing with the Lieutenant Governor.

Section 9. SEVERABILITY

If any provision of this Chapter, or its application to any person or circumstance, is held invalid, the application of such provision to other persons or circumstances, and the remainder of this Chapter, shall not be affected thereby.